

Fig-1

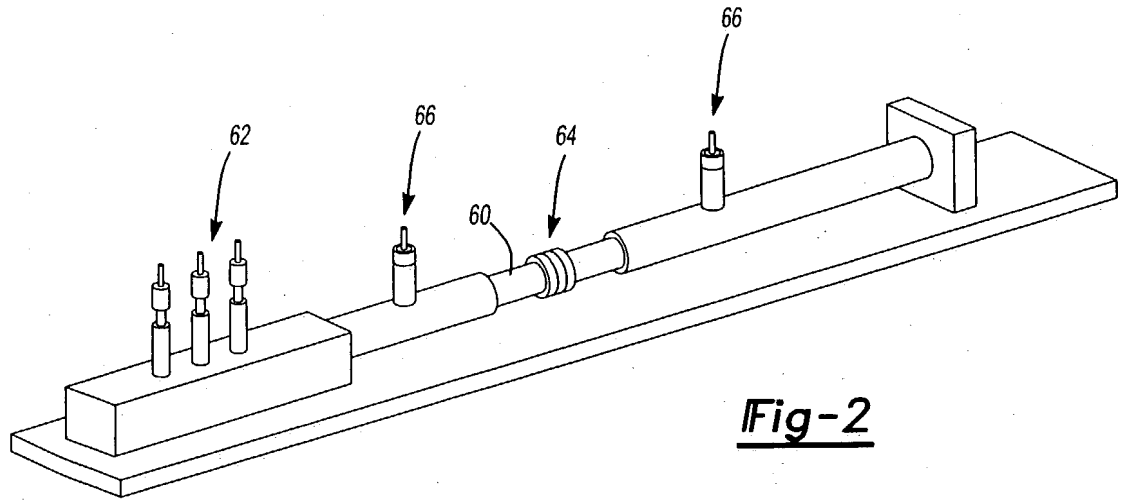


Fig-2

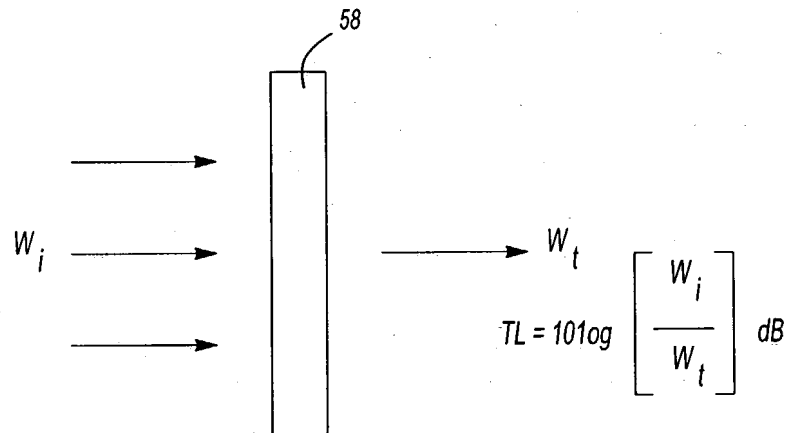


Fig-3

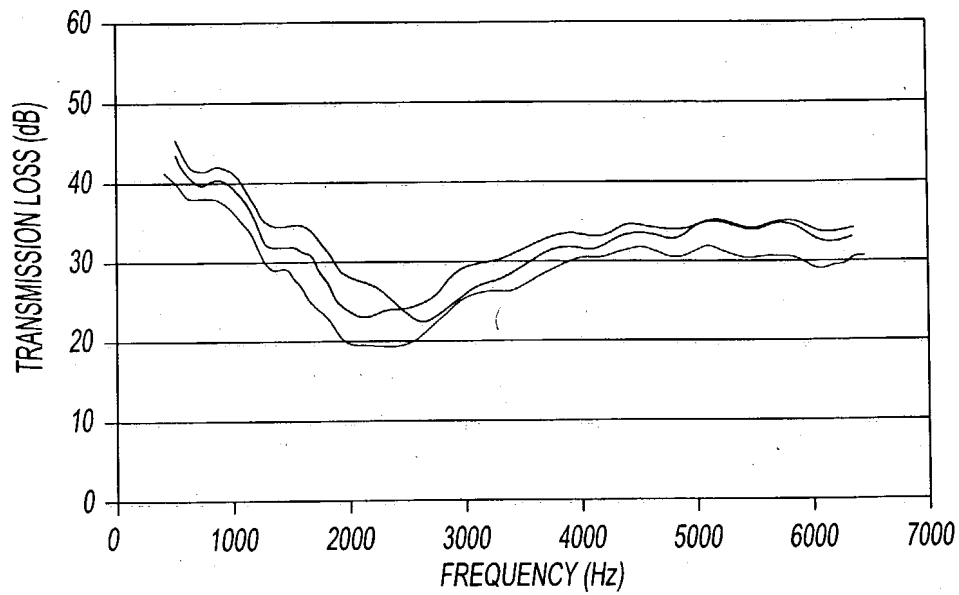


Fig-4A

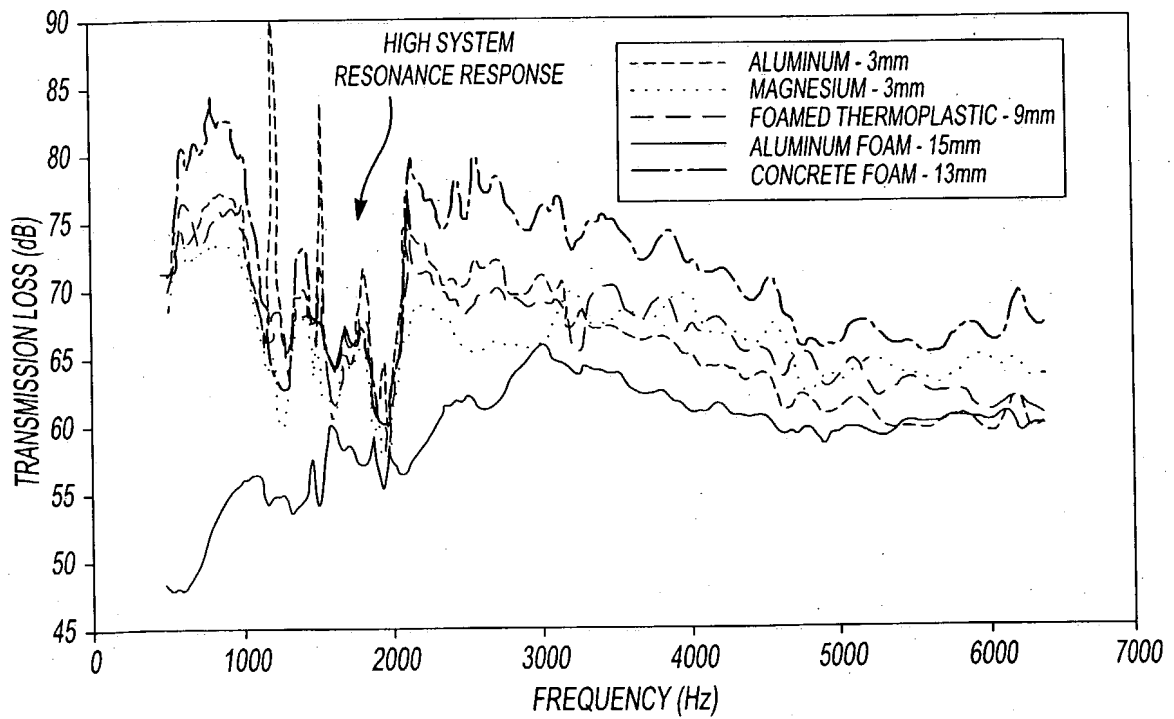


Fig-4B

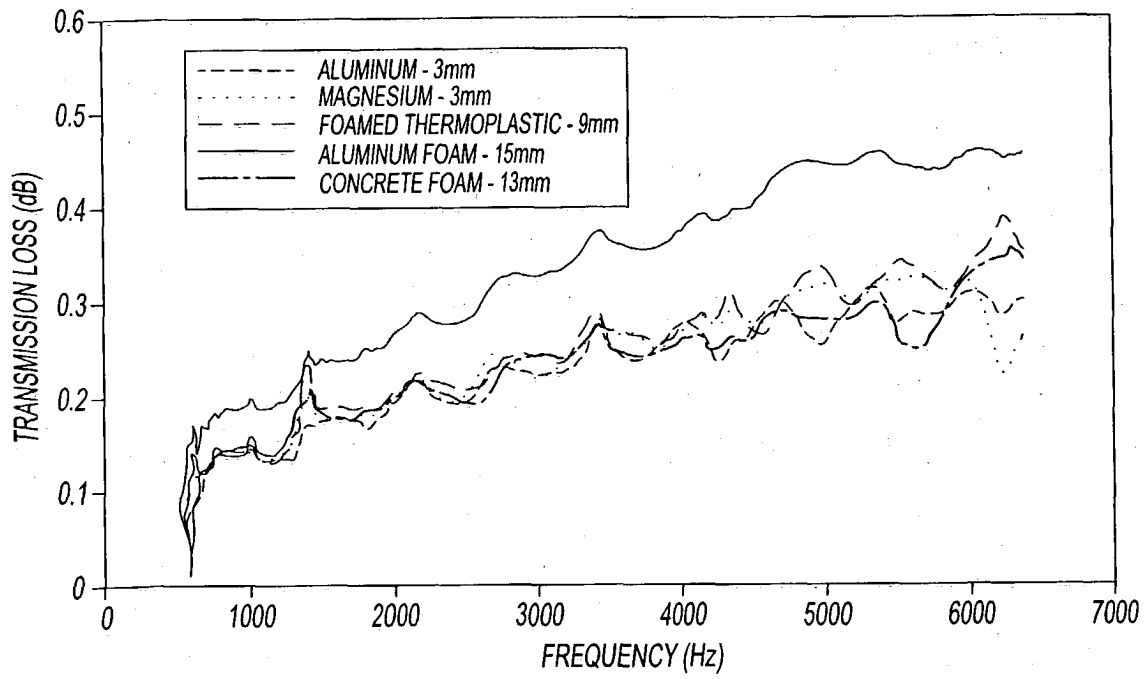


Fig-4C

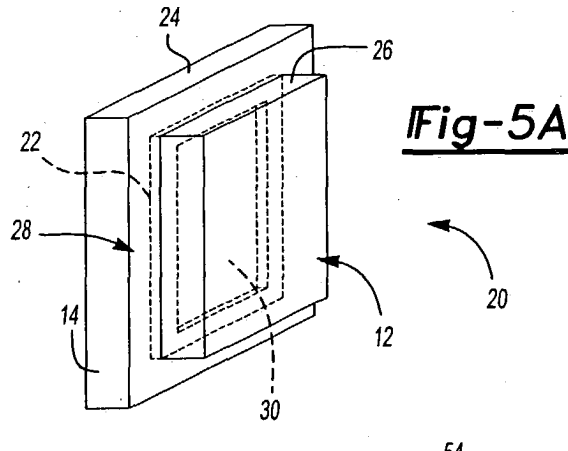


Fig-5A

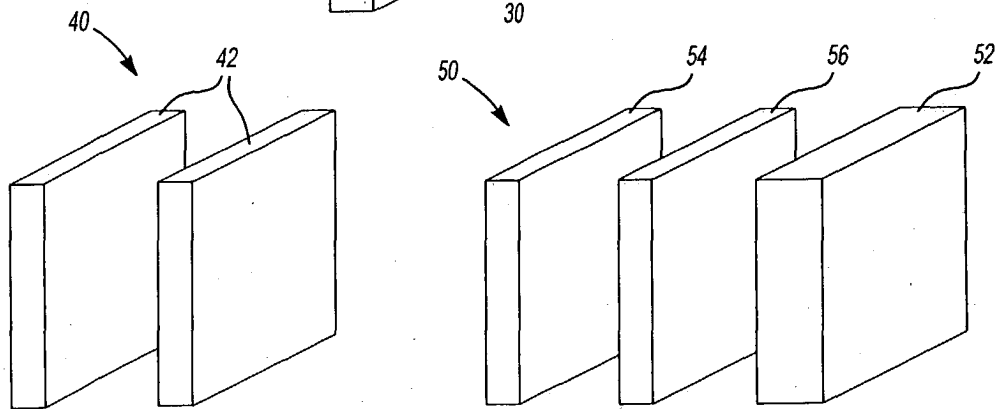


Fig-5B

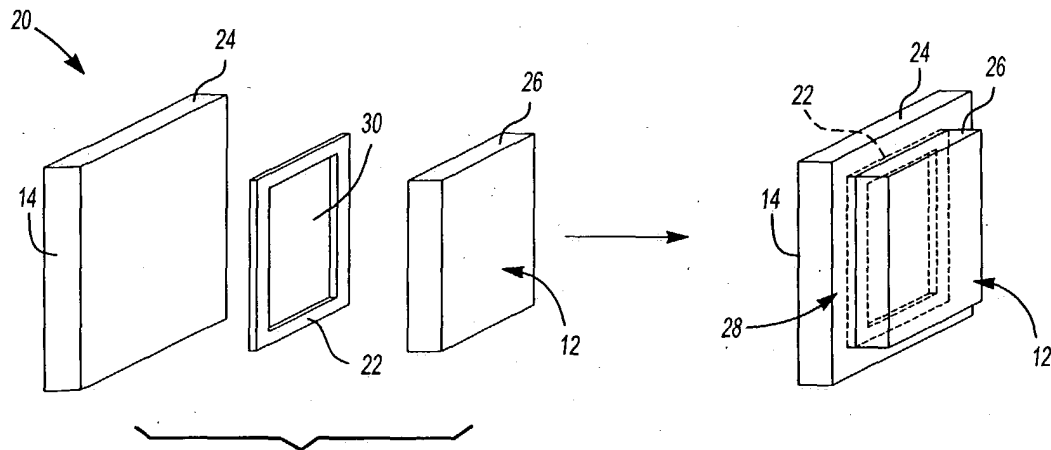


Fig-6

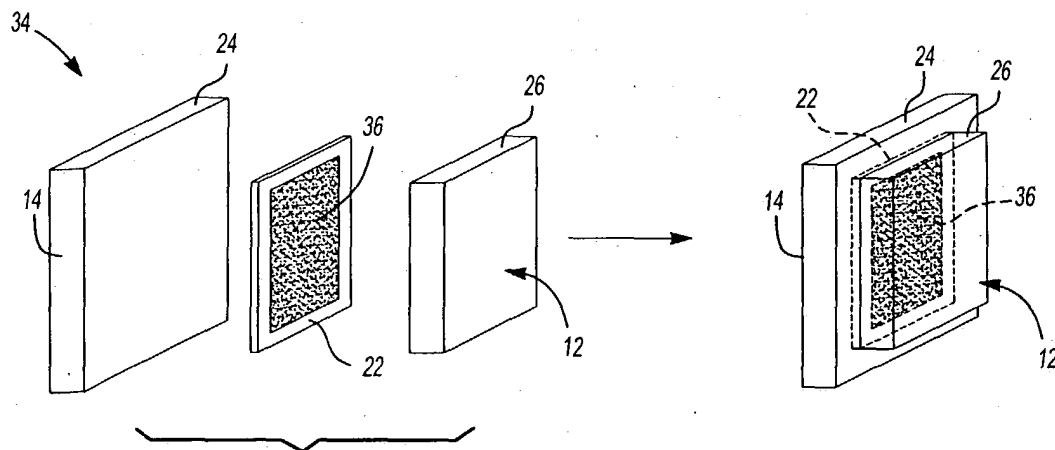


Fig-6A

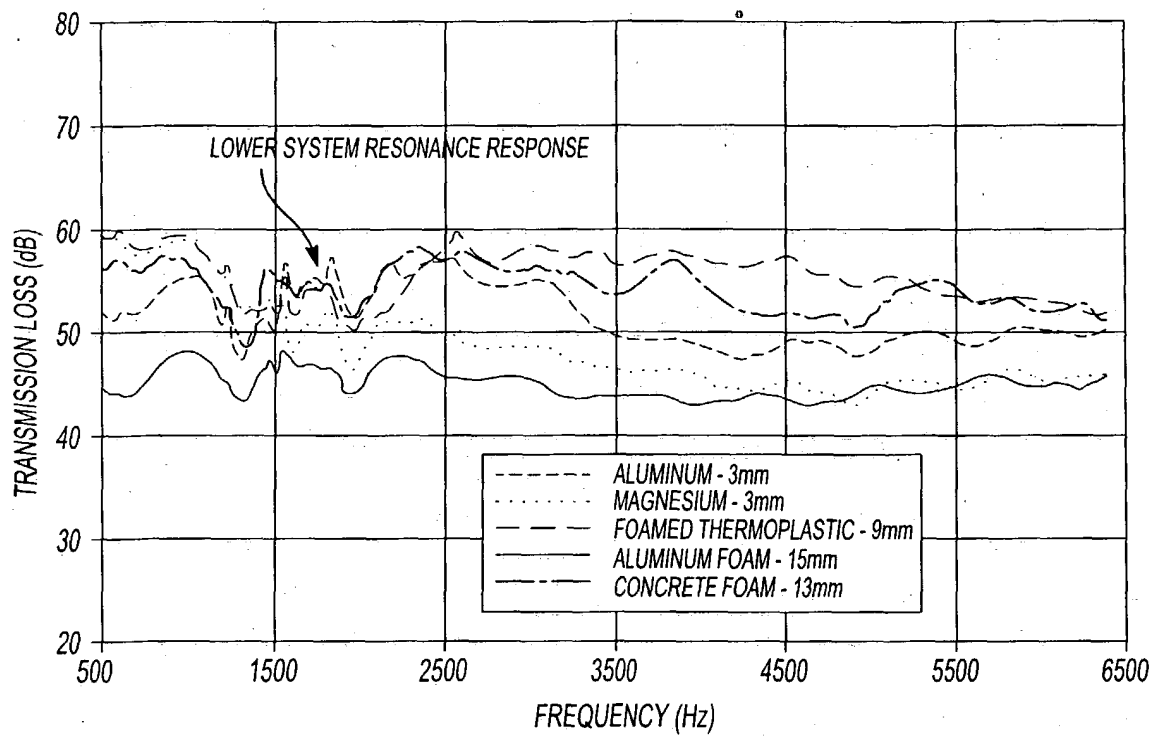


Fig-7A

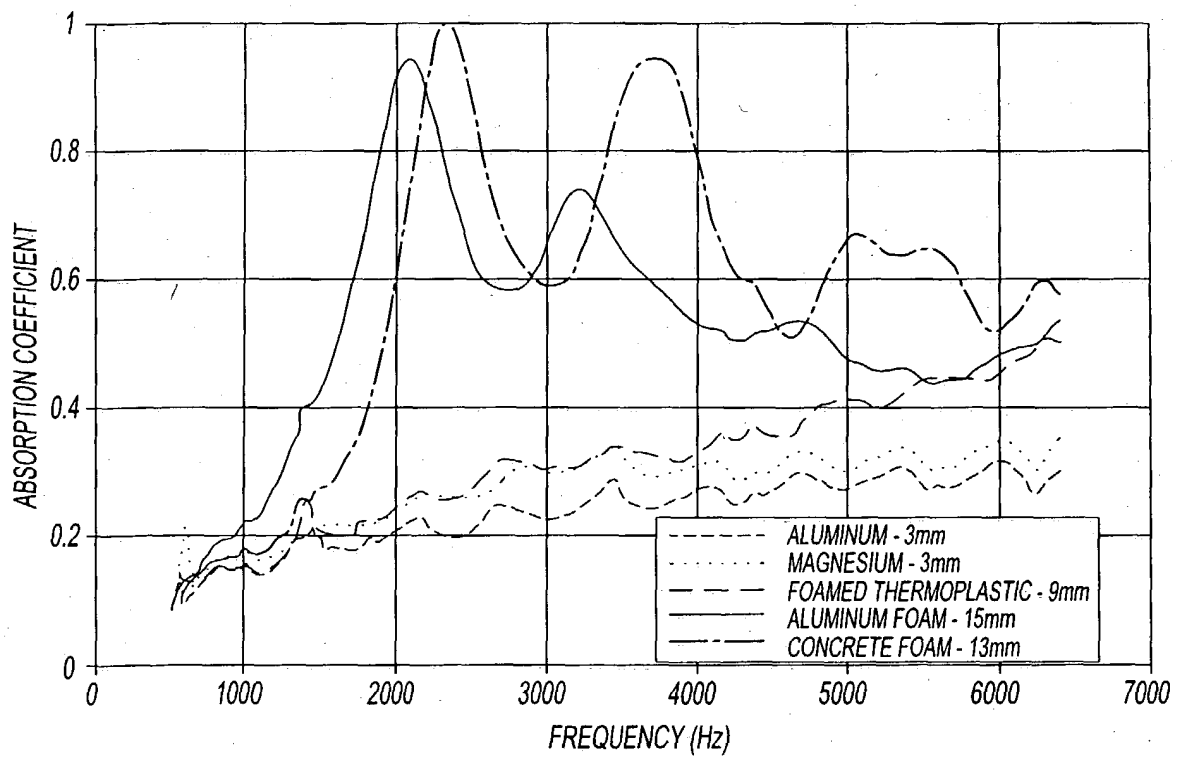
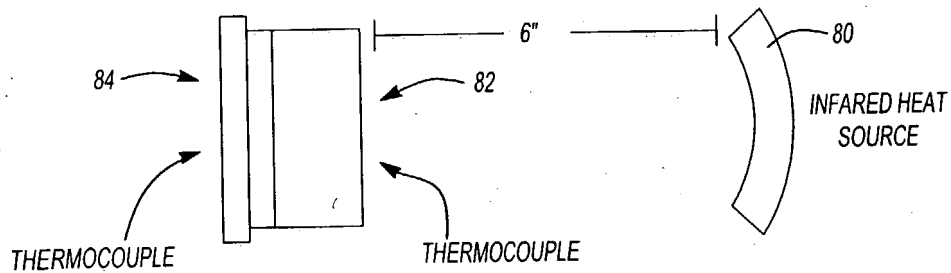


Fig-7B



MATERIAL	THICKNESS (mm)	TEMPERATURE DIFFERENCE ACROSS PANEL (°F)
SOLID ALUMINUM	1	38
SOLID MAGNESIUM	1.5	50
ALUMINUM FOAM	13	76
DECOUPLED ALUMINUM	15	127
CONCRETE FOAM	14	98
DECOUPLED CONCRETE	16	135
CRS WITH FIRE ALL INSULATION (16mm)	17	250
DECOUPLED ALUMINUM WITH FIREWALL INSULATION (7mm THICK)	23	250

Fig-7C

TITLE: COMPOSITE METAL FOAM DAMPING/REINFORCEMENT
STRUCTURE

APPLICANTS: CZAPLICKI ET AL.
ATTORNEY DOCKET NO. 1001-119

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MATERIAL	DENSITY (g/cc)	THICKNESS (mm)	MASS (kg)
ALUMINUM	2.7	3.0	2.47
ALUMINUM	2.7	1.5	1.23
VISCOELASTIC MATERIAL	1.0	1.5	0.46
FOAMED ALUMINUM	0.4	15	1.83
SYSTEM TOTAL	----	18	3.52

MAGNESIUM	1.7	1.5	0.78
VISCOELASTIC MATERIAL	1.0	1.5	0.46
FOAMED ALUMINUM	0.4	15	1.83
SYSTEM TOTAL	----	18	3.07

ASSUMES 533.2mm CROSS SECTIONAL AREA PIECE

Fig-7D